

ABSTRACT

Squelch circuit and method useful in frequency-scanned radio receivers are provided. Generally, the squelch circuit includes an audio-removal filter coupled to receive an audio signal. The passband of the audio-removal filter is selected sufficiently high relative to frequency components of the audio signal. An absolute value detector is coupled to the audio-removal filter to supply an output signal having a positive polarity regardless of the polarity of the signal supplied by the audio-removal filter. An integrating filter is coupled to receive the output signal from the absolute value detector and supply an integrated signal. The integrating filter has at least one selectable filter coefficient indicative of the response time of the integrating filter. A control module is configured to select a first value for the selectable filter coefficient so that during a first mode of operation of the squelch circuit the response time of the integrating filter is sufficiently fast to determine the power level of the integrated signal over a predefined time interval relative to respective squelch thresholds. The control module is further configured to select a second value for the selectable filter coefficient so that during a second mode of operation subsequent to the first mode of operation the response time of the integrating filter is sufficiently slow to smooth out power level variations, if any, due to fading of the audio signal.

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